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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,682	02/20/2004	Harvey A. Restaino	C382.12-0146	6991
27367	7590	07/13/2005	EXAMINER	
WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 - INTERNATIONAL CENTRE 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			BERHANU, SAMUEL	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,682

Applicant(s)

RESTAINO ET AL.

Examiner

Samuel Berhanu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/20/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/21/04, 8/13/2004, 8/24/04, 9/10/04, 3/25/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed on June 21, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The following documents have not been considered because copies were not provided:

59-17893, 59-17894, 2749397, 2926716. Appropriate correction is required.

Specification

2. The disclosure is objected to because of the following informalities: "the first hole 217" described on page 18 line 9 is not in the drawing. It appears number 219 was intended. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-4, 7-9, 18 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kowalski et al. (US 5,772,468).

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Regarding Claims 1 and 18, Kowalski et al. disclose in Figures 1-12 an apparatus for coupling a battery charger and/or battery tester to a battery, comprising: a cable (48); a first elongate clamp member ((12) having a first jaw (18) end and a first hand grip end separated by a first pivot coupling (16), the first hand grip having a first hole formed therein (42); a second elongate clamp (14) member having a second jaw (22) end and a second hand grip (24) end separated by a second pivot coupling (16), the second elongate clamp member pivotally joined to the first elongate clamp member by the first and second pivot couplings (16) whereby the first and second jaws are generally aligned together; a terminal (40) electrically coupled to the cable (48) having a terminal hole formed therein aligned with the first hole in the first hand grip; and a removable fastener (42) which couples the terminal to the first hand grip through the first hole and the terminal hole whereby the first hand grip can be disconnected from the cable (Column 5, lines 18-26).

Regarding Claim 3, Kowalski et al. disclose, the cable (48) includes a main electrical connector electrically coupled to the terminal and capable of carrying a high current (Column 5, lines 66-67)

Regarding Claim 4, Kowalski et al. disclose, the high current comprises a charging current configured to charge the battery (Column 2, lines 27-30)

Regarding Claim 7, Kowalski et al. disclose in Figure 3 a spring (26) coupled to the first and second elongate clamp members configured to urge the first and second jaws together to a closed position (Column 4, lines 40-43).

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Regarding Claim 8, Kowalski et al. disclose, the first hand grip and the second hand grip are covered with an insulating material (Column 2, lines 59-67).

Regarding Claim 9, Kowalski et al. disclose the terminal comprises a tin-plated ring, (42).

Regarding 18, Kowalski et al. disclose, a method of coupling a battery charger and/or a battery tester to a battery, the method comprising: providing a cable (48); providing a first elongate clamp (12) member pivotally joined to a second elongate clamp member (14) by first and second couplings (16), the first elongate clamp member having a first hole (42); providing a terminal electrically coupled to an end of the cable (48) and having a terminal hole formed therein which aligns with the first hole in the first elongate clamp member; and removably fastening (42) the terminal to the clamp member through the first hole and the terminal hole such that the clamp can be disconnected from the cable (Column 5, lines 18-26).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 11-14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowalski et al. (US 5,772,468) in view of Johnson (4,969,834).

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Regarding Claim 2, Kowalski et al. disclose the claim invention, except the apparatus including a first electrical plug electrically coupled to the clamp and a second electrical plug electrically coupled to the cable, the first and second plugs configured to removably electrically couple together. However, Johnson discloses in Figure 4, the apparatus including a first electrical plug (20) electrically coupled to the clamp and a second electrical plug (83) electrically coupled to the cable, the first and second plugs configured to removably electrically couple together (Column 4, lines 66-68, Column 5, lines 1-8). It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Kowalski et al. clamp assembly and add a plug as taught by Johnson in order to provide reliable connection between the cable and the clamp terminal.

Regarding Claim 11, Kowalski et al. disclose the claim invention as claim 1 above, (see rejection above, 35 USC § 102, paragraph 3), except a first electrical plug coupled to the clamp and a second electrical plug coupled to the cable, wherein the first and second electrical plug removably electrically couple together. However, Johnson discloses in Figure 4, a first electrical plug (20) coupled to the clamp and a second electrical plug coupled to the cable (28), wherein the first and second electrical plug removably electrically couple together (Column 4, lines 66-68, Column 5, lines 1-8). It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Kowalski et al. clamp assembly and add a plug for connection means as taught by Johnson in order to provide a reliable electrical connection.

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Regarding Claim 12, Johnson discloses, wherein the first plug (20) is electrically coupled to the clamp through a first portion of a first electrical connector (21) and a first portion of a second electrical connector (24).

Regarding Claim 13, Johnson discloses, wherein the second plug is (83) electrically coupled to the cable through a second portion of the first electrical connector (81) and a second portion of the second electrical connector (82).

Regarding Claim 14, Johnson discloses in Figuer 4, the first and second portions of the first electrical connector and the first and second portions of the second electrical connector are configured to removably electrically couple together through the first and second plugs (Figure 4).

Regarding Claim 19, Kowalski et al. disclose the claim invention, except the method comprising: providing a first electrical plug electrically coupled to the clamp and a second electrical plug electrically coupled to the cable; and removably connecting the first electrical plug and the second electrical plug such that the first and second electrical plugs can be electrically disconnected from each other. However , Johnson discloses a first electrical plug (20) electrically coupled to the clamp and a second electrical plug (83) electrically coupled to the cable; and removably connecting the first electrical plug and the second electrical plug such that the first and second electrical plugs can be electrically is connected from each other (Column 4, lines 66-68, Column 5, lines 1-8) . It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Kowalski et al. clamp assembly and add a plug for

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connection means as taught by Johnson in order to provide a reliable electrical connection.

Regarding Claim 20, Johnson discloses, discloses in Figures 4 and 8 wherein removably connecting the first and second electrical plugs (20,83) comprises: electrically connecting a first portion of a first electrical connector from the first plug to the clamp and connecting a second portion of the first electrical connector from the second plug to the cable; and electrically connecting a first portion of a second electrical connector from the second plug to the clamp and connecting a second portion of the second electrical connector from the second plug to the cable.

Regarding Claim 22, Kowalski et al. disclose, the cable (48) includes a main electrical connector electrically coupled to the terminal and capable of carrying a high current (Column 5, lines 66-67)

7. Claims 5, 6, 15-16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowalski et al. (US 5,772,468) in view of Vonderhaar et al.(US 6,469,511).

Regarding Claim 5, Kowalski et al. disclose the claim limitation, except the cable includes a first electrical connector (and a second electrical connector, wherein at least one of the first connector and the second connector provides a Kelvin connection capable of injecting a forcing function into the battery and measuring a voltage across the battery. However, Vonderhaar et al. disclose in Figures 7 and 8 the cable includes a first electrical connector (720) and a second

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electrical connector (722), wherein at least one of the first connector and the second connector provides a Kelvin connection capable of injecting a forcing function into the battery and measuring a voltage across the battery (Column 5, lines 1-26). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a voltage monitoring means as taught by Vonderhaar et al. in Kowalski et al. clamp assembly in order to monitor status of a battery.

Regarding Claims 6 and 16, Vonderhaar et al. disclose in Figure 7, at least one of the first connector and the second connector provides a sensor lead for sensing a physical property of the battery (720, Column 5, lines 10-15).

Regarding Claim 15, Kowalski et al. disclose the claim limitation, except one of the first and second electrical connectors includes two electrically isolated electrical contacts that provide a Kelvin connection. However, Vonderhaar et al. disclose in Figures 7 and 8, one of the first and second electrical connectors includes two electrically isolated electrical contacts that provide a Kelvin connection. It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a voltage monitoring means as taught by Vonderhaar et al. in Kowalski et al. Clamp assembly cable in order to monitor status of a battery.

Regarding Claim 21, Kowalski et al. disclose the claim limitation, except the first electrical connector includes two electrically isolated electrical contacts which provide a Kelvin connection and the second electrical connector comprises a sensor lead. However, However, Vonderhaar et al. disclose in Figures 7 and 8

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the first electrical connector includes two electrically isolated electrical contacts which provide a Kelvin connection and the second electrical connector comprises a sensor lead (720, Column 5, lines 10-15). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a voltage monitoring means as taught by Vonderhaar et al. in Kowalski et al. clamp assembly in order to monitor status of a battery.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kowalski et al. (US 5,772,468) in view of Hatrock (US 4,983,086).

Regarding Claim 10, Kowalski et al. disclose the claimed invention, except the replaceable fastener comprises a nut (20) and bolt (10). However, Hatrock discloses in Figure 1, the replaceable fastener comprises a nut and bolt. It would have been obvious to use a nut and a bolt fastener means as taught by Hatrock in Kowalski et al. clamp in order to provide securable fastener assembly

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kowalski et al. (US 5,772,468) in view of Johnson (4,969,834)) as applied to claim 13 above, and further in view of Hatrock (US 4,983,086).

Regarding Claim 17, Kowalski et al. and Johnson disclose the claim limitation, except the first and second electrical connectors comprise acid-resistant connectors. However, Hatrock disclose, the first and second electrical connectors comprise acid-resistant connectors (Column 5, lines 9-17). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a non-metallic acid resistant material as taught by Hatrock in Kowalski electrical connection in order to improve life of the electrical connection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Berhanu whose telephone number is 571-272-8430. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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